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# Michigan

## 2013 Annual Spring Emerging 911 Technology Forum

*NG911 Specifications for Equipment RFPs*

ARCHITECTURE • ENGINEERING • COMMUNICATIONS TECHNOLOGY

AVIATION | CIVIL | CONSTRUCTION SERVICES | DATA SYSTEMS | ENVIRONMENTAL  
FACILITIES ENGINEERING | GEOSPATIAL | NETWORKS | PUBLIC SAFETY | TRANSPORTATION

# Overview

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## Today's Topics

NG9-1-1 Defined	<i>Equipment</i>
i3 Defined	<i>Equipment Specifications</i>
Why Change	<i>Maintenance Agreements</i>
What Does it Do	<i>Service Level Agreements</i>
How to Build	Training

# NG9-1-1 Defined

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- An open architecture, interoperable network that enables E9-1-1 requests for service from any networked communication device
- Deliver voice and data
- Receive and retrieve information
- Transfer voice and data
- Enable information sharing

# i3 Defined

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- i3 is a collection of NENA Standards
- Hardware
- Software
- Data
- Security
- Policies

# Why Change?

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## ➤ Public use of technology

- Cell Phones
- VoIP
- Text Messaging

## ➤ Interconnecting

- PSAPs
- Fire, Police
- Healthcare



# What Remains the Same?

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You will see

- Controller
- Workstations
- Telephones
- Call Logging Recorder
- Contracts
  - Services
  - Vendors
  - RFPs
- Connectivity

You will answer emergency calls

# What Does it Do?

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I do not care about definitions, planning or what you call it - - This is what it better do...

- Improve public safety
- Make a call takers job easier
- Make responding quicker, better and more efficient
- Break down boundaries and silos of critical information
- Enable the seamless exchange of information
- Provide better service to the public

# How to Build

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## Building Blocks

- Planning
- Network
- Equipment
- Data
- Policies
- Training



# Planning

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A. Know what you have

B. Know your goal

Plan to get from A to B

- Inventory and Assess (A)
- Design and Procurement
- Management and Maintenance
- Implementation (B)

Put words on paper

# Equipment

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- Controller
- Workstations
- Telephones
- Call logging recorder
- Firewalls
- Routers, switches
- Master Clock
- UPS
- Generator

# Equipment Knowledge

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- Know what you need
- Capabilities of each device
- Interoperability (with other devices)
- Maintenance Agreements
- Service Level Agreements

# What do I need?

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Obtain specifications from:

- Previous RFI
- Your neighbor's contract
- Compliance with another authority
- Ask

# References

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## NENA Standards

- 08-506 ESInet Design
  - Firewalls, Voice Quality, Network Specifications, SLAs
- 08-501 IP PSAP Interface
  - Voice Quality, Call Handling
- 75-001 NG-SEC
  - Physical and Network
- 04-502 E9-1-1 PSAP CPE Site Characteristics Technical Information Document
  - Equipment Room and Electrical Contractor Checklists

# Break from the Lists

A request for proposal (RFP) is a solicitation made, often through a bidding process, by an agency or company interested in procurement of a commodity, service or valuable asset, to potential suppliers to submit business proposals.

It is submitted early in the procurement cycle, either at the preliminary study, or procurement stage. *The RFP process brings structure to the procurement decision and is meant to allow the risks and benefits to be identified clearly up front.*

# A Few Tips

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Call recorder – where does it sit?

Controller – do you need a new one or will your current model support IP ports? Will your new one support CAMA ports during transition...is that functionality included in the price?

Be careful with your wording. Avoid words such as capable and support. If you need something - say - must include, must be compliant.

# Maintenance Agreements

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- What is covered
- Hours of operation
- Escalation process
- Time to repair
- Time to replace
- Software and firmware upgrades
  - How are they received
  - Do they require an attached modem?
  - Include security requirements



# Service Level Agreements

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- Performance
- It is not broke, but it barely functions
- Length of time you can tolerate being down
- Maintenance windows  
(you can say, must not interfere with call delivery)

# The Little Things

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Redundancy and failover – explain how you plan to never be down....

If you have to move to the backup equipment, how quickly will the vendor repair or replace the original equipment. What is the change over time, when one device fails, how quickly does the other come on line? Does it require any manual intervention?

Is your equipment properly grounded? Who is responsible for grounding? Not all network racks provide adequate grounding. Material composition and type of finish affect ground capabilities.

Voice quality - thresholds for jitter, latency and packet loss.

# Training - Education

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Does the contract include training for:

- Call takers
- Administrators
- Stakeholders

Service providers

# Summary

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- NG9-1-1 and i3
- Compliant vs capable
- Plan
- Equipment specifications
- Maintenance and SLA

# Contacts and Questions

Questions

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